



DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket No. NHTSA-2018-0052]

Denial of Motor Vehicle Defect Petition, DP17-002

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Denial of petition for a defect investigation.

SUMMARY: This document denies a January 11, 2017, petition, as submitted under Office of Defects Investigation (ODI) ID number 10944318, from Ms. Laura Nagel of Springfield, VA, requesting that the agency open an investigation into an alleged defect resulting in engine stall without warning after refueling in a model year (MY) 2007 Jeep Patriot. The petitioner's vehicle is a 2007 Jeep Patriot. The National Highway Traffic Safety Administration (NHTSA) evaluated the petition by analyzing consumer complaints submitted to the Agency, by reviewing two prior evaluations of the same apparent defect issue, and by reviewing technical and field information provided by FCA US, LLC (FCA) in response to an information request letter from the Agency. After completing this evaluation, NHTSA has concluded that further investigation of the alleged defect in the subject vehicles is unlikely to result in a determination that a safety

related defect exists. The agency accordingly denies the petition.

FOR FURTHER INFORMATION CONTACT: Dr. Abhijit Sengupta, Office of Defects Investigation, NHTSA, 1200 New Jersey Avenue, SE, Washington, DC 20590. Telephone: (202) 366-4293.

SUPPLEMENTARY INFORMATION:

Alleged Defect

The petitioner alleges that her MY 2007 Jeep Patriot vehicle experienced multiple incidents of engine stall without warning shortly after refueling. The petitioner discovered that the defective part is a valve that is integral to the fuel tank, requiring tank replacement to repair the problem. The petitioner alleged that stalling without warning is an unreasonable risk to motor vehicle safety and requests the agency take action by opening a Preliminary Evaluation to fully evaluate the defect.

Engine Stall Defects

The Safety Act, (Chapter 301 of Title 49 of the United States Code (49 U.S.C. 30101 et. seq.)) defines motor vehicle safety as "the performance of a motor vehicle or motor vehicle equipment in a way that protects the public against unreasonable risk of accidents occurring because of the design, construction, or performance of a motor vehicle, and against unreasonable risk of death or injury in an accident, and includes nonoperational

safety of a motor vehicle.” In this instance, the risk involved is a low speed engine stall happening immediately after the fuel tank is overfilled. NHTSA considers several factors when assessing the safety risk posed by conditions that may result in engine stall while driving. These include the speeds at which stalling may occur, the ability of the driver to restart the vehicle, the warning available to the driver prior to stalling, the effects of engine stall on vehicle controllability, when and where the stalling may occur and the effects of the condition on other safety systems of the vehicle. In general, conditions that result in engine stall during low-speed operation at idle, such as when slowing to a stop, and where the engine may be restarted right away, are considered by NHTSA to be among the least hazardous types of stalling problems and, absent other risk factors, are not considered to be unreasonable risks to safety.

Prior ODI Investigation PE13-016

On February 10, 2014, ODI closed an investigation of an alleged defect in approximately 153,817 MY 2006 Chrysler 300, Dodge Charger and Dodge Magnum vehicles (LX cars) that may result in engine stall shortly after refueling (PE13-016). In response to ODI’s information request for PE13-016, FCA identified a problem with the multifunction control valve (MFCV) fuel shutoff float integrated into 19-gallon fuel tanks in

certain LX vehicles. According to FCA, the float may swell after exposure to fuels with high ethanol content, which may cause the valve to stick. A float valve that is stuck open during refueling could result in fuel tank overfill and allow raw fuel to enter the purge line and vapor canister. This could result in problems with engine drivability (e.g., stumble or hesitation) or stall due to a rich fuel mixture while driving, in the brief period immediately after filling the fuel tank.

ODI's complaint review showed most of the engine stall incidents occurred when vehicles were stopped or travelling at low speeds. This review also revealed that no significant difficulty restarting the vehicle was reported and no crashes or injuries were identified in the subject vehicles, which had been in service for 7 to 8 years. The investigation (PE13-016) was closed without a finding of a defect due to the low safety risk associated with the alleged defect condition. Further details of the investigation are available at <https://www.NHTSA.gov>.

Prior ODI Petition DP14-002

In response to ODI's information request letter for DP14-002, FCA indicated that the RS Minivan may experience MFCV float sticking similar to that investigated in PE13-016 and described above. Further details of the investigation are available at <https://www.NHTSA.gov>.

As part of its evaluation of DP14-002, NHTSA's Vehicle Research and Test Center (VRTC) tested a 2005 Chrysler Town & Country LMT (3.6L SFI, 20 gal. fuel tank) that was the subject of an ODI complaint (VOQ 10641603) and proved the vehicle was affected by the sticking in-tank fuel valve. VRTC's examination assessed engine performance after refueling, including the driving conditions and ease of engine restart associated with any observed engine stalls. When refueling the vehicle up to the initial shut-off of the filling station pump nozzle, the VRTC testing was able to reproduce stalling incidents when the vehicle was stopped or coasting to a stop at low speed. The vehicle did not stall 4 out of 5 times when travelling at 5 mph, but minor hesitation was noted. No stalls and only minor hesitation occurred when travelling at 10 mph or above in tanks filled to the initial nozzle shut-off. Stalling was more likely to occur if the tank was overfilled (i.e., adding fuel past the initial fill nozzle shutoff). Testing after overfilling resulted in stalls in 4 of 5 tests at speeds up to 10 mph. Regardless of fill condition, the vehicle could always be immediately restarted after each engine stall.

2008 Jeep Patriot Analysis

In response to ODI's information request letter for DP17-002, FCA indicated that the 2007 Jeep Patriot may experience a condition with MFCV float sticking similar to the one

investigated in the LX Cars in PE13-016 and 2007 Chrysler Minivans in DP14-002. As described above in PE13-016, the failure mechanism is a result of a swollen refueling float within the multifunction control valve. The FCA response also indicated no reported accidents or property damage in a fleet of 29,573 vehicles with more than 4 billion vehicle miles driven over 10 years of service. FCA believes that, predicated upon these findings, there is no unreasonable risk to motor safety. Further details of the investigation will be available in the near future at <https://www.NHTSA.gov>.

ODI's complaint analysis of the alleged defect, completed in March 2017, identified 39 post-refueling engine stall incidents in approximately 29,573 vehicles. Similar to the LX Car analysis in PE13-016, and 2007 Chrysler Minivans analysis in DP14-002, the engine stalls occurred immediately after refueling when the vehicle was stopped or coasting to a stop at low speed. There were no allegations of significant difficulty restarting the engines immediately after the stalls occurred. None of the complaints alleged any crash or injury. Based upon the above facts and the conditions in which any stall occurs, ODI concludes that further investigation is unlikely to result in a finding that a defect related to motor vehicle safety exists.

Conclusion

In the Agency's view, additional investigation is unlikely to result in a finding that a defect related to motor vehicle safety exists given the limited conditions under which the subject condition may result in engine stall. Although NHTSA can and will take action before a defect results in a crash, injury or death, the absence of any reported crashes or injuries in a fleet of nearly 30,000 vehicles estimated to have driven 4 billion vehicle miles indicates that further investigation is not warranted under the facts known to the Agency at this time. Therefore, in view of the need to allocate and prioritize NHTSA's limited resources to best accomplish the agency's safety mission, the petition is denied. The Agency will take further action if warranted by future circumstances.

Authority: 49 U.S.C. 30162(d); delegations of authority at CFR 1.50 and 501.8.

Jeffrey M. Giuseppe,

Associate Administrator for Enforcement.

Billing Code 4910-59-P

[FR Doc. 2018-10404 Filed: 5/15/2018 8:45 am; Publication Date: 5/16/2018]